Grant D Lythe

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1421090/publications.pdf

Version: 2024-02-01

71	1,263	331670 21	414414 32
papers	citations	h-index	g-index

74	74	74	1574
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Stepâ€byâ€step comparison of ordinary differential equation and agentâ€based approaches to pharmacokineticâ€pharmacodynamic models. CPT: Pharmacometrics and Systems Pharmacology, 2022, 11, 133-148.	2.5	3
2	Diffusion in a disk with inclusion: Evaluating Greenâ€™s functions. PLoS ONE, 2022, 17, e0265935.	2.5	0
3	CTLA-4-Mediated Ligand Trans-Endocytosis: A Stochastic Model. , 2021, , 257-280.		0
4	Agent-Based Model of Heterogeneous T-Cell Activation in Vitro. , 2021, , 241-256.		0
5	Fusion and fission events regulate endosome maturation and viral escape. Scientific Reports, 2021, 11, 7845.	3.3	7
6	Competitive binding of STATs to receptor phospho-Tyr motifs accounts for altered cytokine responses. ELife, 2021, 10, .	6.0	21
7	A Stochastic Intracellular Model of Anthrax Infection With Spore Germination Heterogeneity. Frontiers in Immunology, 2021, 12, 688257.	4.8	4
8	Quantifying T Cell Cross-Reactivity: Influenza and Coronaviruses. Viruses, 2021, 13, 1786.	3.3	3
9	Diffusion in a Disk with a Circular Inclusion. SIAM Journal on Applied Mathematics, 2021, 81, 1287-1302.	1.8	1
10	Analysis of Single Bacterium Dynamics inÂa Stochastic Model of Toxin-Producing Bacteria. Lecture Notes in Computer Science, 2021, , 210-225.	1.3	0
11	Quantification of Type I Interferon Inhibition by Viral Proteins: Ebola Virus as a Case Study. Viruses, 2021, 13, 2441.	3.3	1
12	Stochastic dynamics of Francisella tularensis infection and replication. PLoS Computational Biology, 2020, 16, e1007752.	3.2	6
13	On Exact and Approximate Approaches for Stochastic Receptor-Ligand Competition Dynamicsâ€”An Ecological Perspective. Mathematics, 2020, 8, 1014.	2.2	0
14	Quantification of Ebola virus replication kinetics in vitro. PLoS Computational Biology, 2020, 16, e1008375.	3.2	10
15	Stochastic dynamics of Francisella tularensis infection and replication. , 2020, 16, e1007752.		0
16	Stochastic dynamics of Francisella tularensis infection and replication. , 2020, 16, e1007752.		0
17	Stochastic dynamics of Francisella tularensis infection and replication. , 2020, 16, e1007752.		0
18	Stochastic dynamics of Francisella tularensis infection and replication. , 2020, 16, e1007752.		0

#	Article	IF	Citations
19	Fate of a Naive T Cell: A Stochastic Journey. Frontiers in Immunology, 2019, 10, 194.	4.8	7
20	Stochastic Dynamics of $$phi ^4$$ Kinks: Numerics and Analysis. Advances in Dynamics, Patterns, Cognition, 2019, , 93-110.	0.3	1
21	A Novel Stochastic Multi-Scale Model of Francisella tularensis Infection to Predict Risk of Infection in a Laboratory. Frontiers in Microbiology, 2018, 9, 1165.	3.5	7
22	First passage events in biological systems with non-exponential inter-event times. Scientific Reports, 2018, 8, 15054.	3.3	14
23	Some deterministic and stochastic mathematical models of naÃ¯ve Tâ€cell homeostasis. Immunological Reviews, 2018, 285, 206-217.	6.0	21
24	Sampling from T Cell Receptor Repertoires. Contributions in Mathematical and Computational Sciences, 2017, , 67-79.	0.3	3
25	IL-2 Stimulation of Regulatory TÂCells: A Stochastic and Algorithmic Approach. Contributions in Mathematical and Computational Sciences, 2017, , 81-105.	0.3	1
26	A new mechanism shapes the naÃ¯ve CD8 + T cell repertoire: the selection for full diversity. Molecular Immunology, 2017, 85, 66-80.	2.2	24
27	The T Cells in an Ageing Virtual Mouse. , 2017, , 127-140.		5
28	Continuous Effector CD8 + T Cell Production in a Controlled Persistent Infection Is Sustained by a Proliferative Intermediate Population. Immunity, 2016, 45, 159-171.	14.3	75
29	Mathematics in modern immunology. Interface Focus, 2016, 6, 20150093.	3.0	29
30	How many TCR clonotypes does a body maintain?. Journal of Theoretical Biology, 2016, 389, 214-224.	1.7	140
31	T cell and reticular network co-dependence in HIV infection. Journal of Theoretical Biology, 2016, 395, 211-220.	1.7	14
32	Asymmetric cell division during T cell development controls downstream fate. Journal of Cell Biology, 2015, 210, 933-950.	5.2	33
33	Modeling early events in Francisella tularensis pathogenesis. Frontiers in Cellular and Infection Microbiology, 2014, 4, 169.	3.9	17
34	Receptor Pre-Clustering and T cell Responses: Insights into Molecular Mechanisms. Frontiers in Immunology, 2014, 5, 132.	4.8	25
35	From pre-DP, post-DP, SP4, and SP8 Thymocyte Cell Counts to a Dynamical Model of Cortical and Medullary Selection. Frontiers in Immunology, 2014, 5, 19.	4.8	32
36	Accurate stationary densities with partitioned numerical methods for stochastic partial differential equations. Stochastics and Partial Differential Equations: Analysis and Computations, 2014, 2, 262-280.	0.9	3

#	Article	IF	Citations
37	A mathematical perspective on CD4+ T cell quorum-sensing. Journal of Theoretical Biology, 2014, 347, 160-175.	1.7	7
38	Mathematical Model of Naive T Cell Division and Survival IL-7 Thresholds. Frontiers in Immunology, 2013, 4, 434.	4.8	24
39	A stochastic T cell response criterion. Journal of the Royal Society Interface, 2012, 9, 2856-2870.	3.4	26
40	Quorum-Sensing in CD4+ T Cell Homeostasis: A Hypothesis and a Model. Frontiers in Immunology, 2012, 3, 125.	4.8	95
41	How many dendritic cells are required to initiate a T-cell response?. Blood, 2012, 120, 3945-3948.	1.4	69
42	Deterministic and stochastic naive T cell population dynamics: symmetric and asymmetric cell division. Dynamical Systems, 2012, 27, 75-103.	0.4	8
43	T-cell movement on the reticular network. Journal of Theoretical Biology, 2012, 295, 59-67.	1.7	18
44	Timescales of the Adaptive Immune Response. , 2011, , 351-361.		1
45	Multivariate Competition Processes: A Model for Two Competing T Cell Clonotypes. , 2011, , 187-205.		2
46	Stochastic competitive exclusion in the maintenance of the naÃ¯ve T cell repertoire. Journal of Theoretical Biology, 2010, 265, 396-410.	1.7	24
47	The limiting conditional probability distribution in a stochastic model of T cell repertoire maintenance. Mathematical Biosciences, 2010, 224, 74-86.	1.9	16
48	Accurate Stationary Densities with Partitioned Numerical Methods for Stochastic Differential Equations. SIAM Journal on Numerical Analysis, 2009, 47, 1601-1618.	2.3	30
49	Numerical Experiments on Noisy Chains: From Collective Transitions to Nucleation-Diffusion. SIAM Journal on Applied Dynamical Systems, 2008, 7, 207-219.	1.6	8
50	Numerical Methods for Secondâ€Order Stochastic Differential Equations. SIAM Journal of Scientific Computing, 2007, 29, 245-264.	2.8	110
51	Diffusion-limited reaction in one dimension. Physica D: Nonlinear Phenomena, 2006, 222, 159-163.	2.8	5
52	Transmission, Reflection, and Second-Harmonic Generation in a Nonlinear Waveguide. SIAM Journal on Applied Mathematics, 2005, 66, 1-28.	1.8	4
53	Multidimensional Exponential Timestepping with Boundary Test. SIAM Journal of Scientific Computing, 2005, 27, 793-808.	2.8	8
54	Exponential Timestepping with Boundary Test for Stochastic Differential Equations. SIAM Journal of Scientific Computing, 2003, 24, 1809-1822.	2.8	26

#	Article	IF	Citations
55	Riceâ€™s ansatz for overdampedÏ†4kinks at finite temperature. Physical Review E, 2003, 67, 027601.	2.1	4
56	Kinks in a Stochastic PDE. Solid Mechanics and Its Applications, 2003, , 435-443.	0.2	2
57	Dielectric nonlinearity and stochastic effects in strontium titanate. Applied Physics Letters, 2002, 80, 3391-3393.	3.3	14
58	Diffusion-limited reaction in one dimension: Paired and unpaired nucleation. Journal of Chemical Physics, 2001, 115, 73-89.	3.0	20
59	Stochastic PDEs: convergence to the continuum?. Computer Physics Communications, 2001, 142, 29-35.	7.5	14
60	Defect Formation in a Dynamic Transition. International Journal of Theoretical Physics, 2001, 40, 2309-2316.	1.2	1
61	Dynamics of Kinks: Nucleation, Diffusion, and Annihilation. Physical Review Letters, 2000, 84, 1070-1073.	7.8	44
62	Dynamics of defect formation. Physical Review E, 1999, 59, R1303-R1306.	2.1	24
63	Controlling one-dimensional Langevin dynamics on the lattice. Physical Review D, 1999, 60, .	4.7	15
64	Stochastic Stokes Drift. Physical Review Letters, 1998, 81, 3136-3139.	7.8	27
65	Slowly Passing through Resonance Strongly Depends on Noise. Physical Review Letters, 1998, 81, 975-978.	7.8	28
66	Low pump limit of the bifurcation to periodic intensities in a semiconductor laser subject to external optical feedback. Physical Review A, 1997, 55, 4443-4448.	2.5	21
67	Domain formation in transitions with noise and a time-dependent bifurcation parameter. Physical Review E, 1996, 53, R4271-R4274.	2.1	29
68	Dynamics controlled by additive noise. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1995, 17, 855-861.	0.4	7
69	Noise and Resonant Mode Interactions. Annals of the New York Academy of Sciences, 1993, 706, 42-53.	3.8	2
70	Noise and slow-fast dynamics in a three-wave resonance problem. Physical Review E, 1993, 47, 3122-3127.	2.1	22
71	Effective numerical methods for simulating diffusion on a spherical surface in three dimensions. Numerical Algorithms, 0, , .	1.9	0